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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,465	12/03/2001	Thomas Eckel	Mo-6623/LeA 34,860	2780

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BAYER CORPORATION  
PATENT DEPARTMENT  
100 BAYER ROAD  
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EXAMINER
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BUTTNER, DAVID J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 02/07/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/007,465

Applicant(s)

ECKEL ET AL.

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4 6) ☐ Other:

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The Z ratio critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). It is clear from the specification that the Z ratio is the essence of applicant's invention. All claim should require the Z ratio.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim 9 limits (meth)acrylic alkylates to being 1-50% of (c). Earlier in the claim (meth)acrylic alkylates are listed as possibly being 50-99% of (c). The two phrases are inconsistent. The same problem exists in claim 10.

Claim 12 does not appear to be further limiting.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 and 4 are rejected under 35 USC 102(b) as anticipated or in the alternative under 35 U.S.C. 103(a) as obvious over the Wittmann '759 Patent.

Wittmann exemplifies (table 2) blends of polycarbonate, ABS and SAN. The ISO impact strength at  $-20^{\circ}\text{C}$  meet applicant's claims.

Claims 1-4, 6, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Eckel '493 Patent.

Eckel exemplifies (# 9) a blend of polyestercarbonate, polycarbonate, MMA/BA grafted polybutadiene and styrene/MAH copolymer. The grafted rubber should not more than 7% free (ungrafted) copolymer (col. 5 line 36). The impact strength at  $-20^{\circ}\text{C}$  meets applicant's claim 2.

Claims 1-4, 6, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Grigo '960 Patent.

Grigo exemplifies (# 9) a blend of polycarbonate and a graft of 20 parts MMA on 80 parts polybutadiene. Even if little of the MMA failed to graft to the rubber, the ratio of rubber to free ungrafted PMMA would be 4/1.

Grigo also measures impact strength at  $-20^{\circ}\text{C}$  to be  $49.5 \text{ KJ/M}^2$ .

Claims 1-4, 6, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Dufour '754 Patent.

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Dufour produces an ABS (col. 4 line 36) that contains 82% elastomer phase and 18% rigid phase. The elastomer phase is styrene and acrylonitrile grafted to a diene rubber. The rigid phase is SAN. The ABS is then blended with polycarbonate (table III).

Claims 1-4, 6, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Grigo '758 Patent.

Grigo exemplifies (# 2) a blend of polycarbonate, PET and a MMA/BA grafted polybutadiene. The amount of free (ungrafted) MMA/BA could not be more than 20 parts. Therefore, the "Z" ratio must be greater than 4.

Claims 1-4, 6, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Eckel '404 Patent.

Eckel produces an ABS of high graft yield (col. 14 line 45). It is then blended with PC and SAN (table 4).

Claims 1-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Gosens '394 Patent.

Gosens exemplifies (# V) a blend of PC, ABS and phosphate. The ABS has a rubber content of 70% (col. 6 line 13). At most, the amount of free (ungrafted) SAN would be 30%. Therefore, the Z ratio must be above 70/30.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Eckel '493 or Grigo '960 or Eckel '404 in view of Gosens '394.

Each of the primary references suggest the inclusion of flame retardants, but do not name any species.

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Phosphates are well known flame retardants for PC compositions. It would have been obvious to add any phosphate flame retardant to the primary references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 703-308-2403. The examiner can normally be reached on Weekdays from 10:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

DAVID J. BUTTNER  
PRIMARY EXAMINER

D. Buttner/mn  
February 6, 2003

